

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-12 (canceled)

13. (currently amended) A method of forming a cross-fill metal fill pattern in an integrated circuit that provides a plurality of purposeful functions, comprising:

forming a first plurality of parallel traces electrically connected;

forming a second plurality of parallel traces electrically connected;

electrically routing said first plurality of parallel traces to a common power rail in said integrated circuit; ~~and~~

electrically routing said second plurality of parallel traces to a common ground rail in said integrated circuit; and

over-routing signal bearing metal lines over said first plurality of parallel traces and said second plurality of parallel traces;

wherein said cross-fill metal pattern provides metal fill as a first purposeful function, and as a second purposeful function provides at least one of capacitance across a power supply, and electro-magnetic shielding to protect an analog circuit therebelow from said over-routed signal bearing metal lines.

14. (original) The method of forming a metal fill pattern in an integrated circuit that provides a plurality of purposeful functions according to claim 13, further comprising:

forming interdigitated fingers physically connected to at least one of said first plurality of parallel traces; and

forming interdigitated fingers physically connected to at least one of said second plurality of parallel traces.

15. (currently amended) The method of forming a metal fill pattern in an integrated circuit that provides a plurality of purposeful functions according to claim 13, wherein:

said cross-fill metal pattern achieves three purposeful functions of (1) providing metal fill, (2) provides decoupling capacitance across a power supply when powering said integrated circuit, and (3) provides an electro-magnetic shield to protect an analog circuit therebelow from said over-routed signal bearing metal lines.

16. (currently amended) Apparatus for forming a cross-fill metal fill pattern in an integrated circuit that provides a plurality of purposeful functions, comprising:

means for forming a first plurality of parallel traces electrically connected;

means for forming a second plurality of parallel traces electrically connected;

means for electrically routing said first plurality of parallel traces to a common power rail in said integrated circuit; and

means for electrically routing said second plurality of parallel traces to a common ground rail in said integrated circuit; and

means for over-routing signal bearing metal lines over said first plurality of parallel traces and said second plurality of parallel traces;

wherein said cross-fill metal pattern provides metal fill as a first purposeful function, and as a second purposeful function provides at least one of capacitance across a power supply, and electro-magnetic shielding to protect an analog circuit therebelow from said over-routed signal bearing metal lines.

17. (original) The apparatus for forming a metal fill pattern in an integrated circuit that provides a plurality of purposeful functions according to claim 16, further comprising:

means for forming interdigitated fingers physically connected to at least one of said first plurality of parallel traces; and

means for forming interdigitated fingers physically connected to at least one of said second plurality of parallel traces.

18. (currently amended) The method of forming a metal fill pattern in an integrated circuit that provides a plurality of purposeful functions according to claim 16, wherein:

said cross-fill metal pattern achieves three purposeful functions of (1) providing metal fill, (2) provides decoupling capacitance across a power supply when powering said integrated circuit, and (3) provides an electromagnetic shield to protect an analog circuit therebelow from said over-routed signal bearing metal lines.